

111

FIG. 1

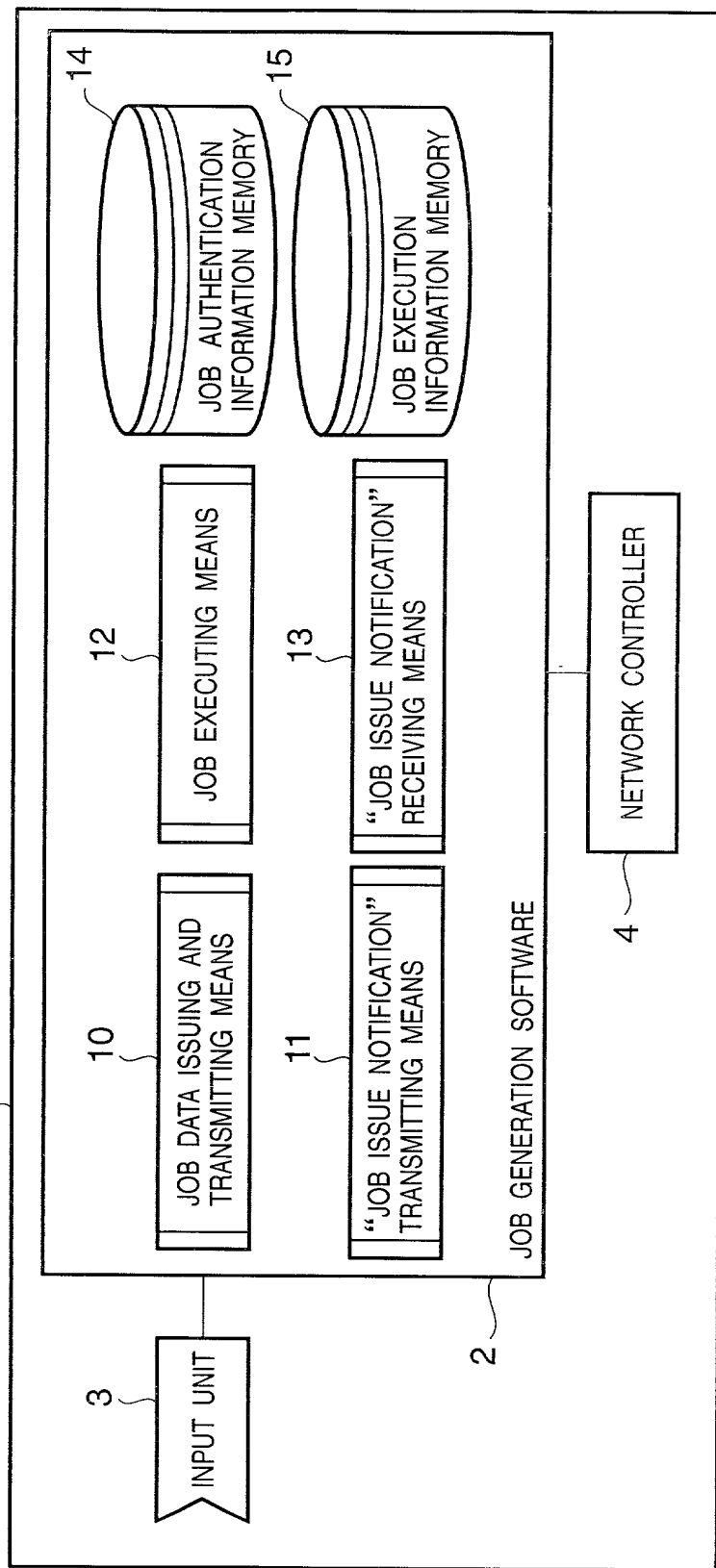


FIG. 2

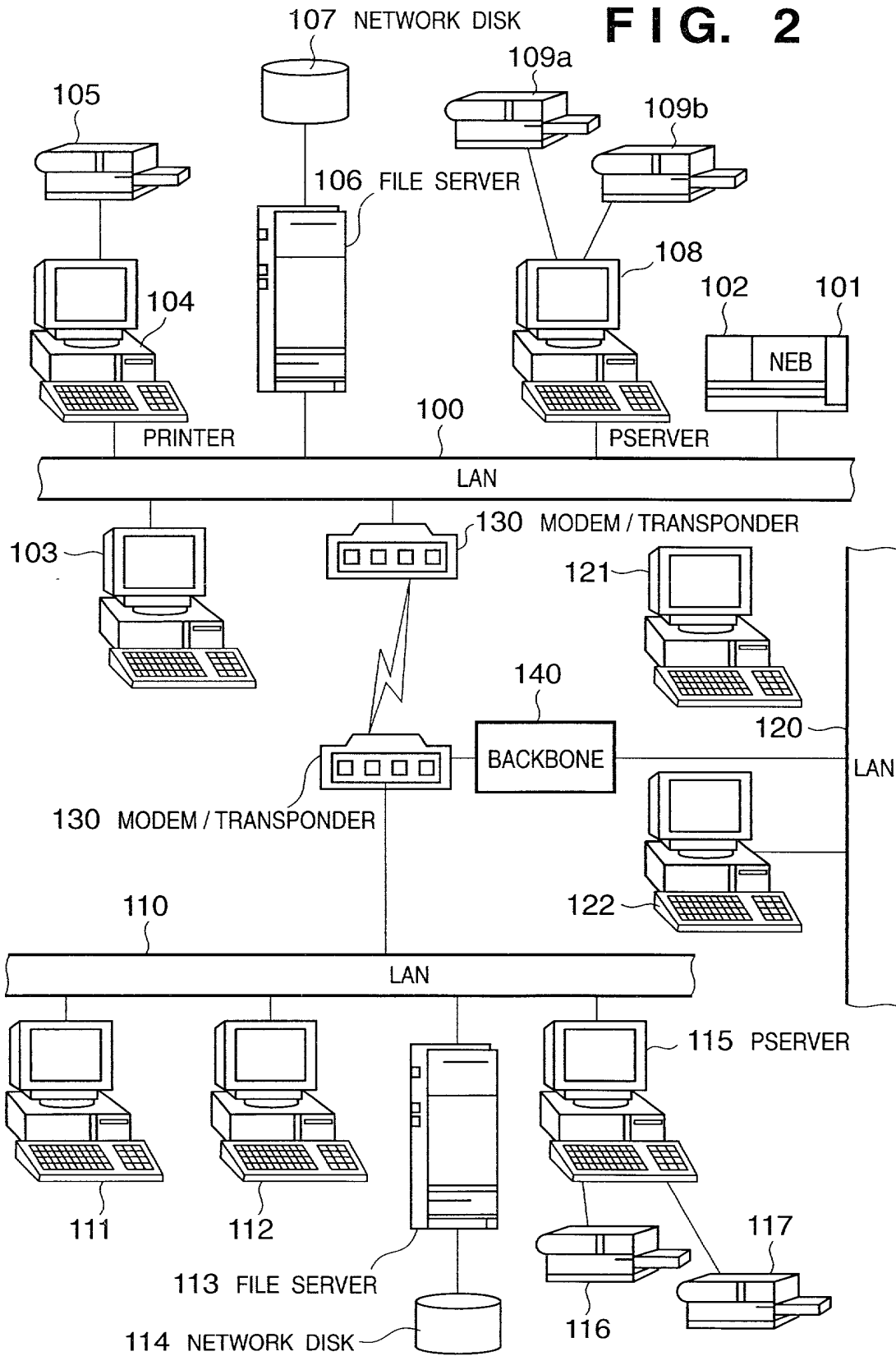


FIG. 3

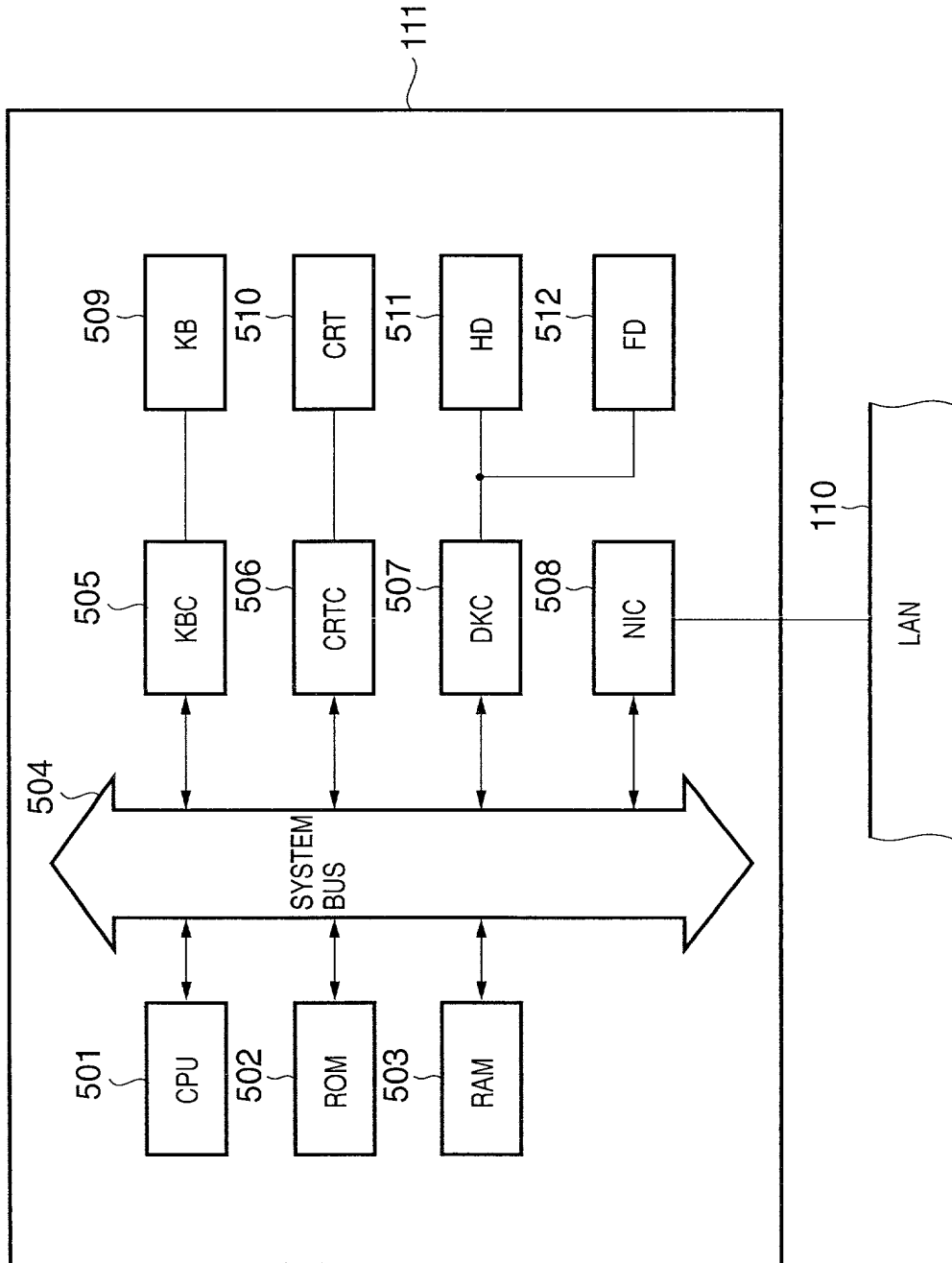


FIG. 4

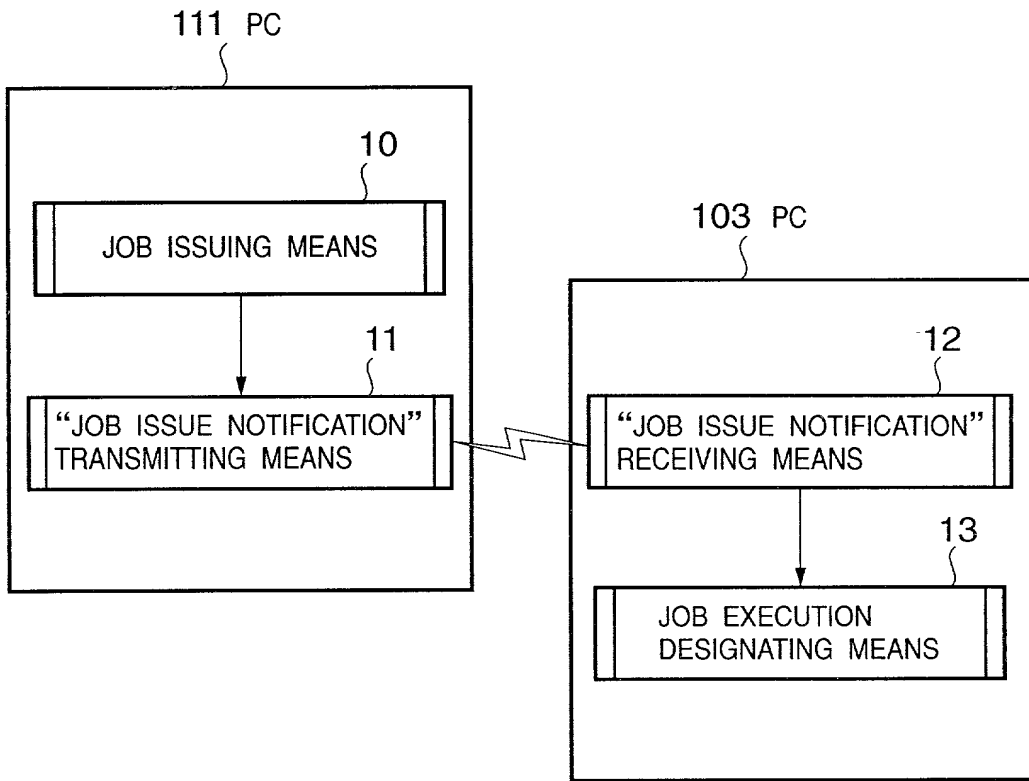
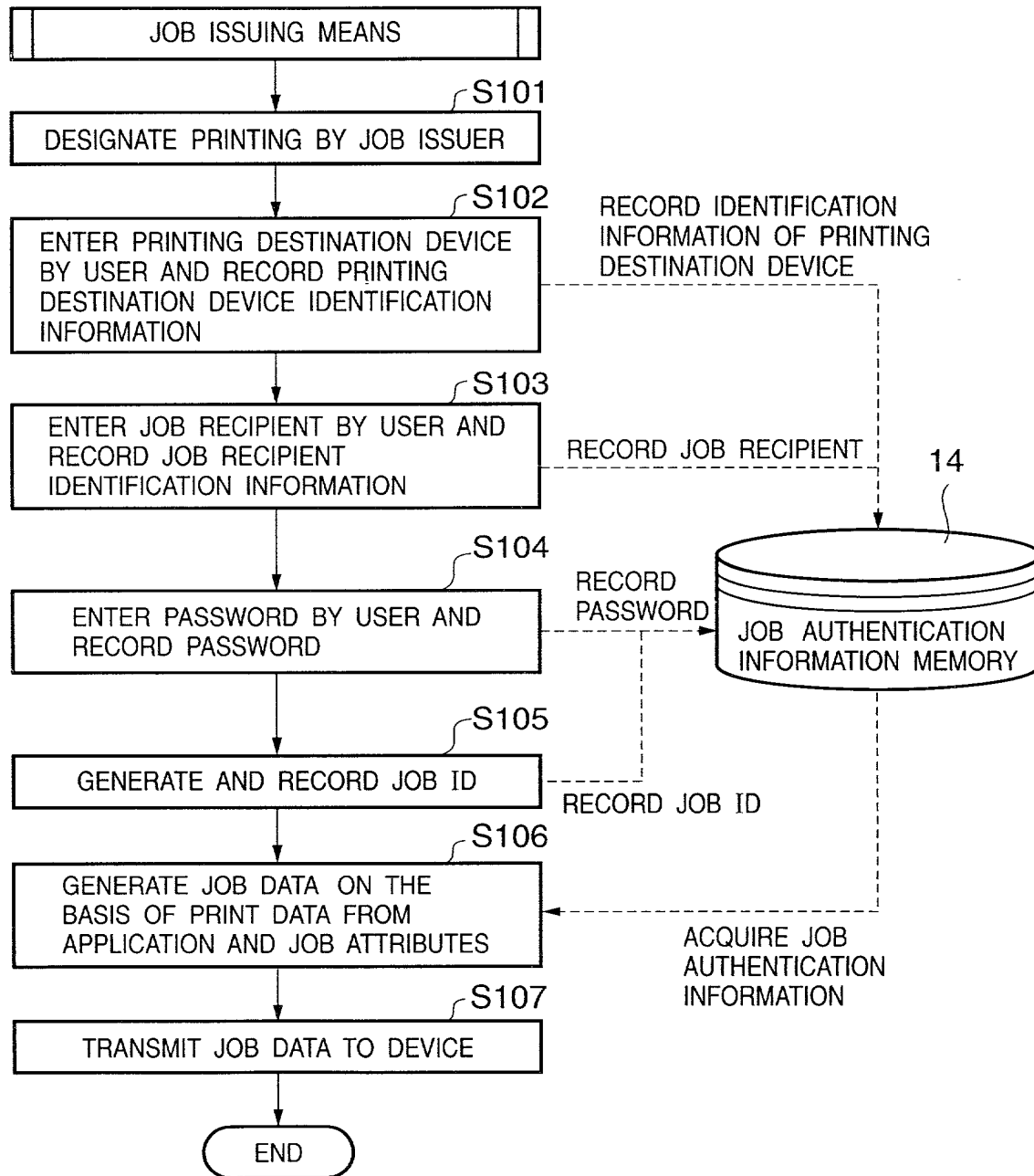


FIG. 5



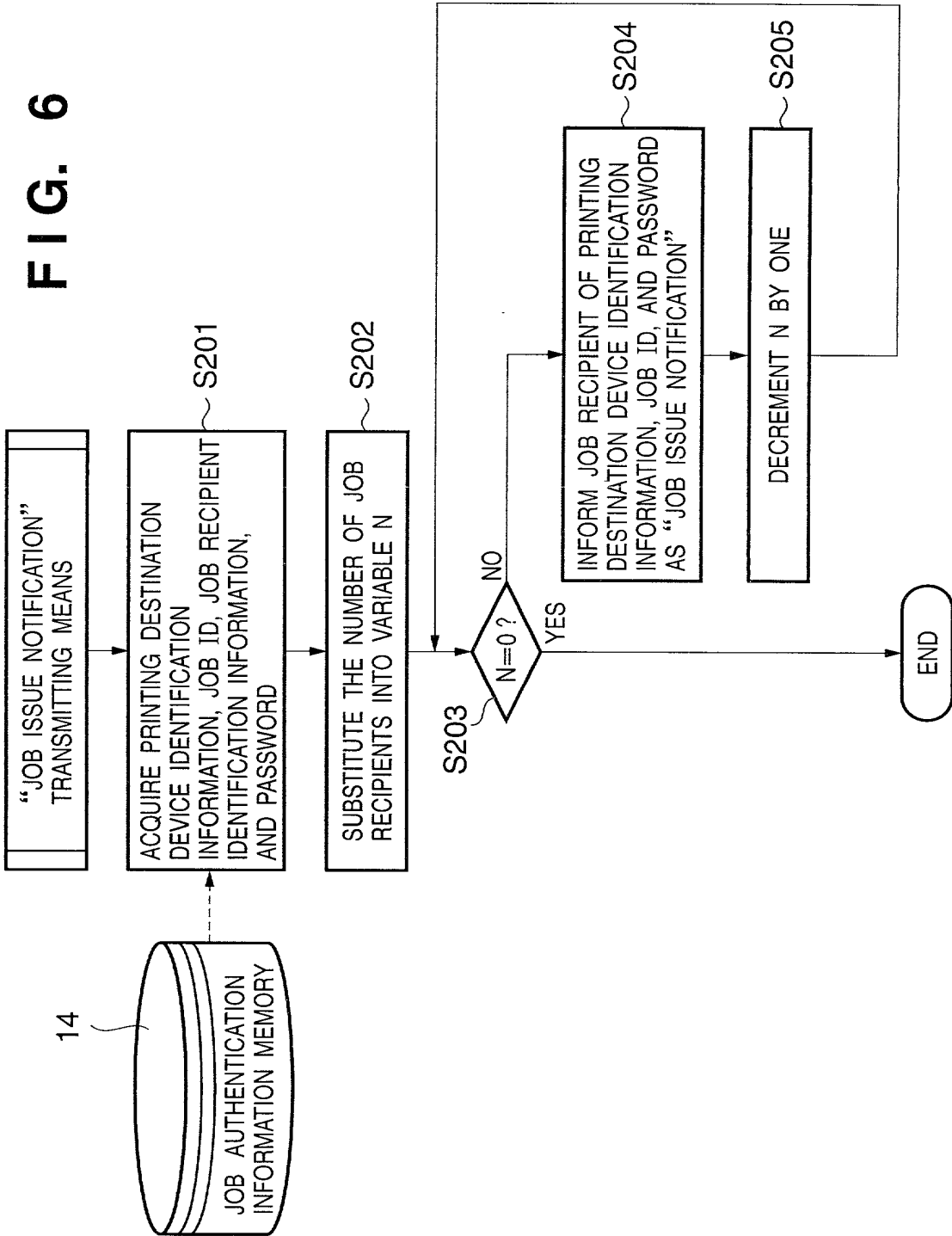


FIG. 7

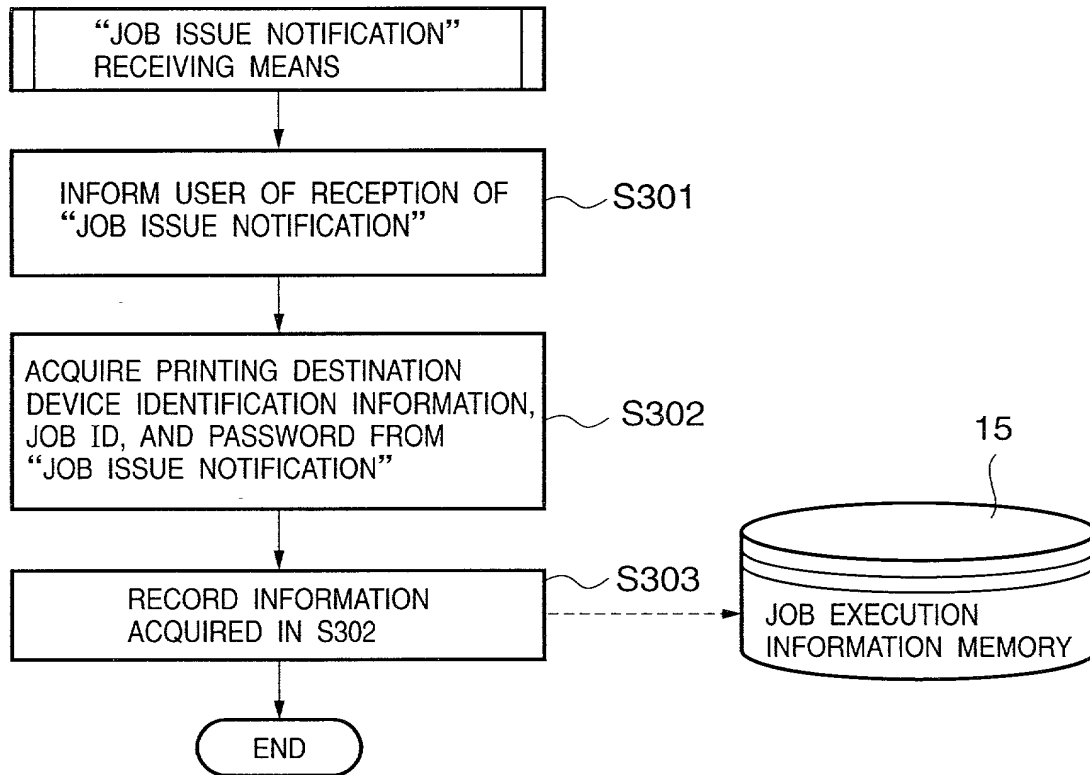
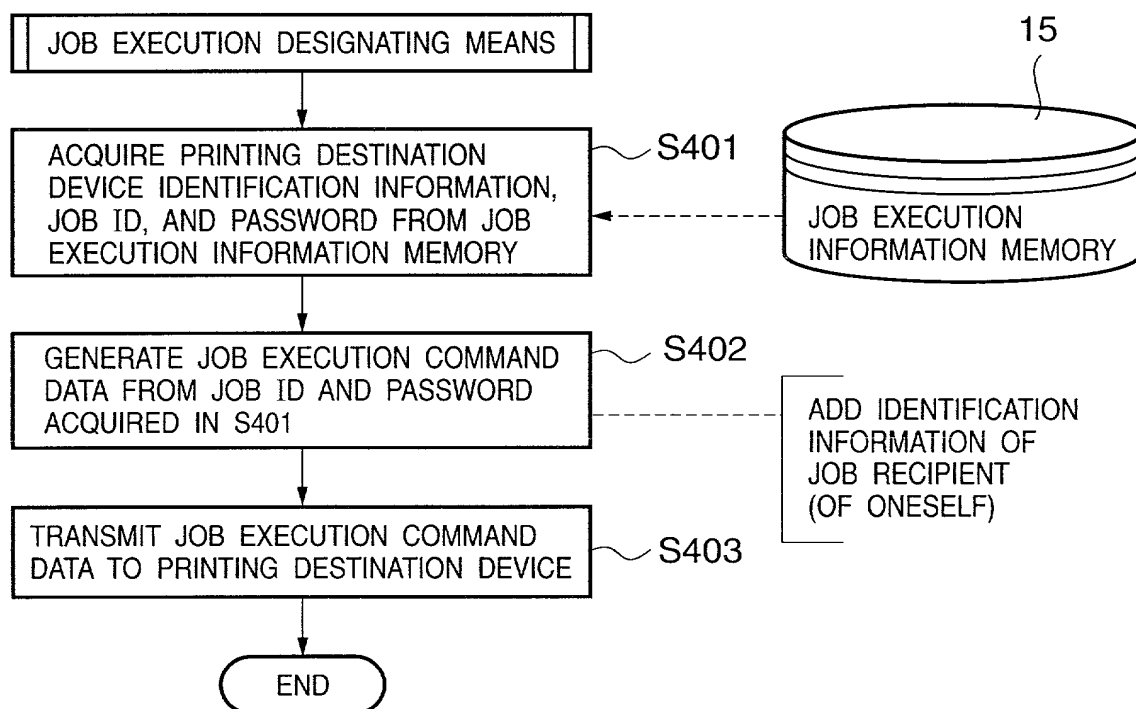


FIG. 8



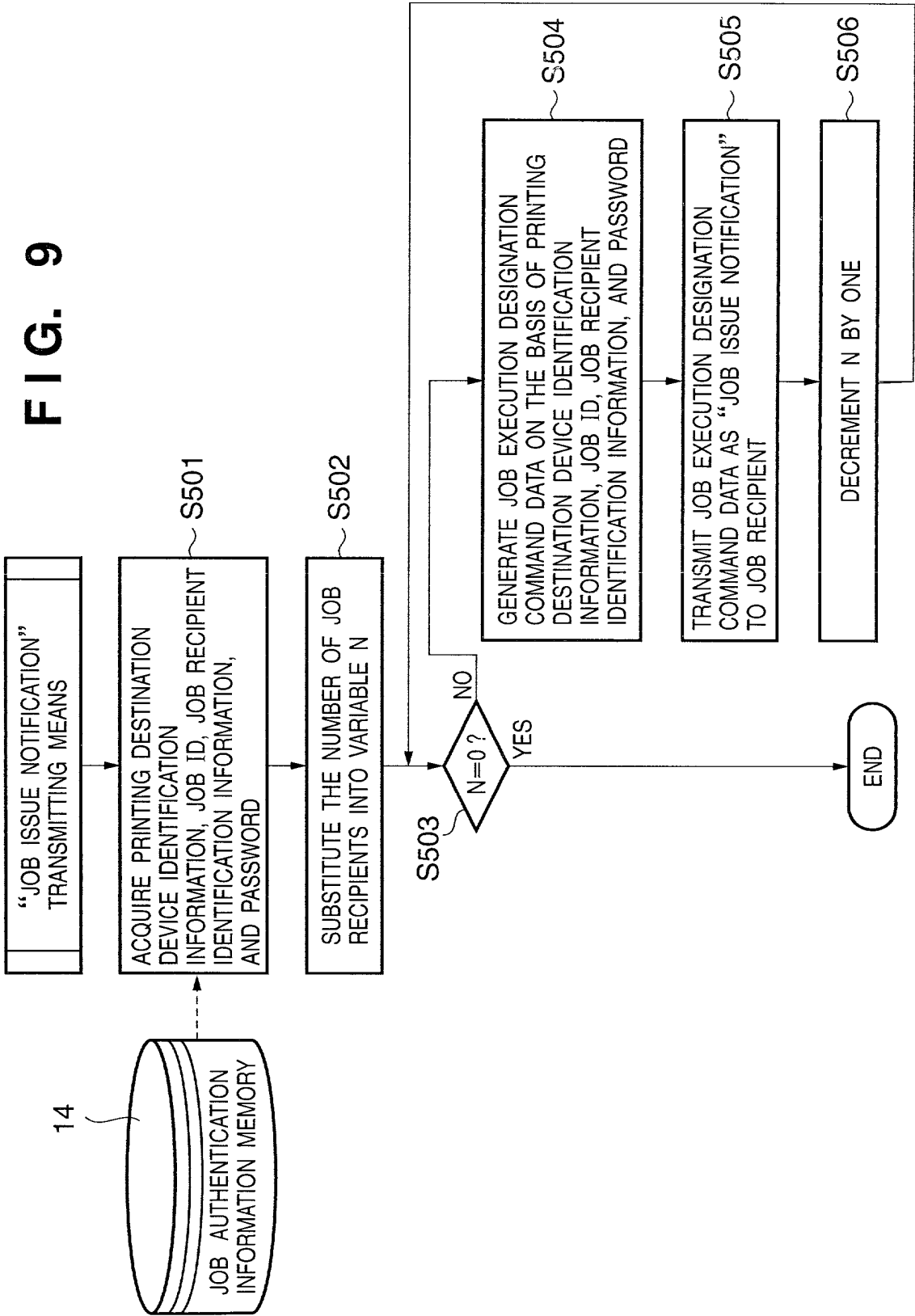


FIG. 10

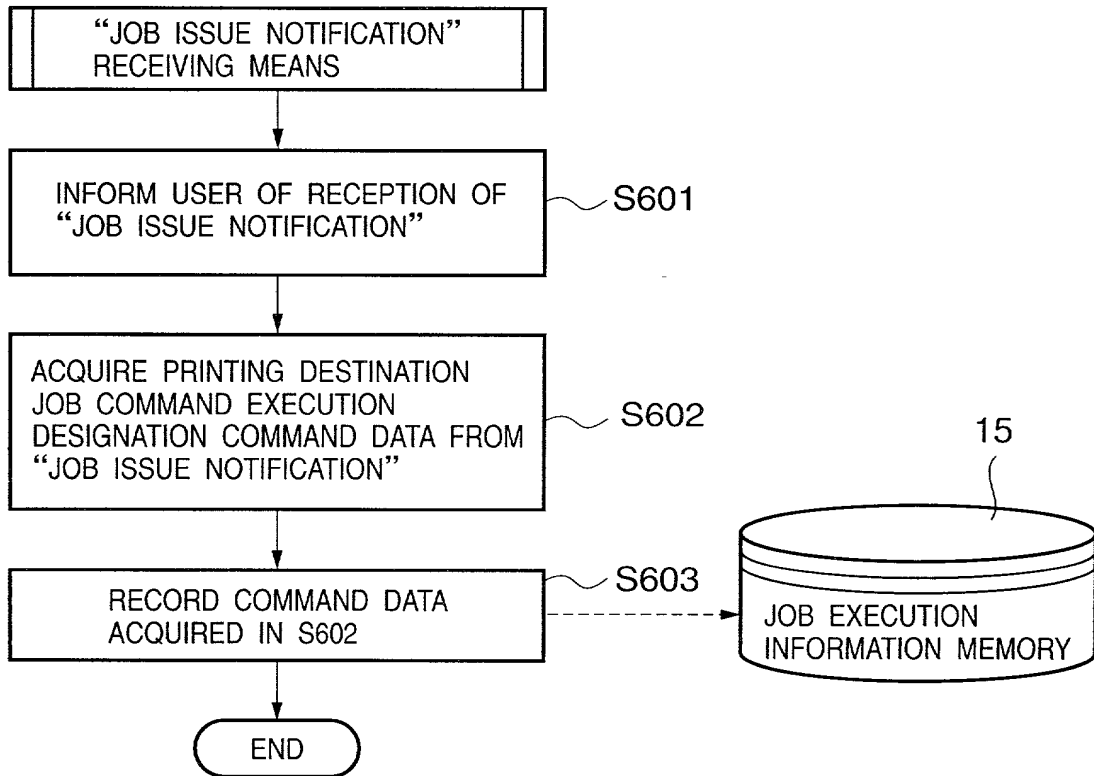


FIG. 11

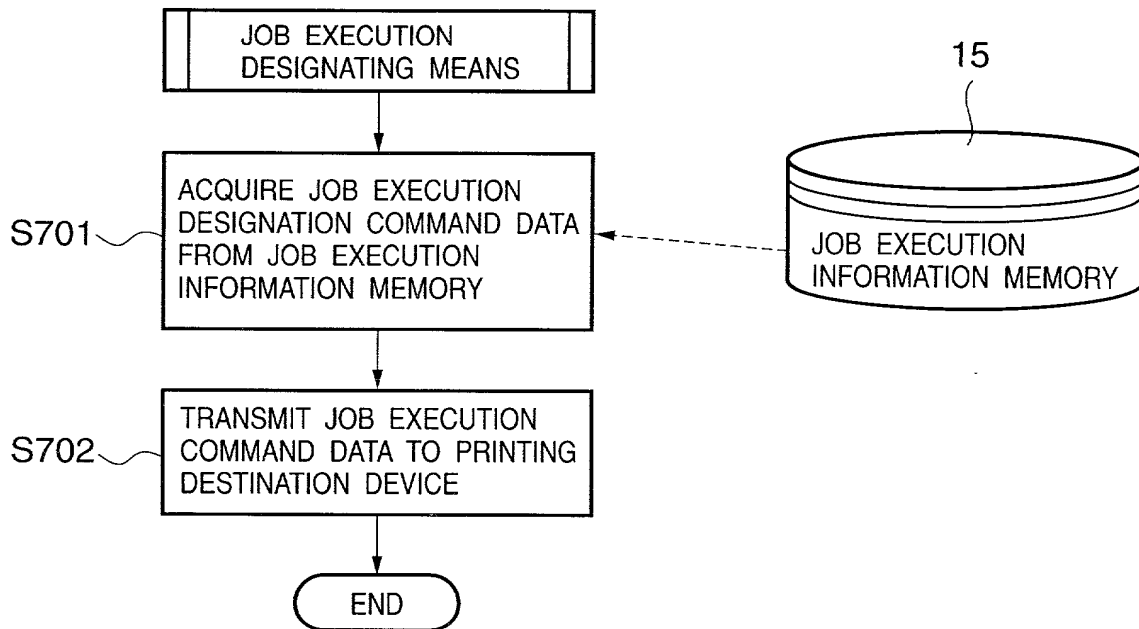


FIG. 12

OPERATIONS USED

| OPERATION | FUNCTION SUMMARY | SCRIPT SUMMARY |
|------------|----------------------------|---|
| JobStart | START ISSUE OF JOB | SET JOB ATTRIBUTES BY SetJob AND TERMINATE SETUP BY JobEnd |
| SetJob | SET JOB ATTRIBUTES | SET JOB ATTRIBUTES NECESSARY FOR JOB AUTHENTICATION BY THIS OPERATION |
| Send | TRANSMIT PRINT DATA | |
| JobEnd | TERMINATE ISSUE OF JOB | |
| ExecuteJob | DESIGNATE EXECUTION OF JOB | DESIGNATE JOB EXECUTION TOGETHER WITH JOB ATTRIBUTES NECESSARY FOR JOB EXECUTION DESIGNATION AND JOB AUTHENTICATION BY THIS OPERATION |

FIG. 13

JobStart

[TRANSMISSION PACKET]

| Bit Byte | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|-------------|---|---|---|---|---|---------------|--------------|-------------|
| 0~2 | Packet Header ID & Version | | | | | | | |
| 3 | 0 | 0 | 0 | 0 | 0 | RqRep. (1) | Cont. (0) | Send (0) |
| 4~5 | Operation Code=id_val_operation_job_start | | | | | | | |
| 6~7 | Block Number=0x0001~0xFFFF | | | | | | | |
| 8~9 | Parameter Length=0x0009 | | | | | | | |
| 10~13 | User ID=0x00000000~0xFFFFFFFF | | | | | | | |
| 14~17 | Password=0x00000000~0xFFFFFFFF | | | | | | | |
| 18~19 | Status Code=0x0000 | | | | | | | |
| 20~23 | Object Handle (JOB ID) | | | | | | | |

[RETURN PACKET]

| Bit Byte | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|-------------|---|---|---|---|---|---------------|----------------|--------------|
| 0~2 | Packet Header ID & Version | | | | | | | |
| 3 | 0 | 0 | 0 | 0 | 0 | NoRep. (0) | Cont. (0/1) | Reply (1) |
| 4~5 | Operation Code=id_val_operation_job_start | | | | | | | |
| 6~7 | Block Number=0x0001~0xFFFF | | | | | | | |
| 8~9 | Parameter Length=0x0004 | | | | | | | |
| 10~13 | User ID=0x00000000~0xFFFFFFFF | | | | | | | |
| 14~17 | Password=0x00000000~0xFFFFFFFF | | | | | | | |
| 18~19 | Status Code=0x0000~0xFFFF | | | | | | | |
| 20~23 | Object Handle (JOB ID) | | | | | | | |

FIG. 14

SetJob

[TRANSMISSION PACKET]

| Bit Byte | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|-------------|---|---|---|---|---|-----------------|----------------|-------------|
| 0~2 | Packet Header ID & Version | | | | | | | |
| 3 | 0 | 0 | 0 | 0 | 0 | RqRep. (0/1) | Cont. (0/1) | Send (0) |
| 4~5 | Operation Code=id_val_operation_Set_job | | | | | | | |
| 6~7 | Block Number=0x0001~0xFFFF | | | | | | | |
| 8~9 | Parameter Length=0x0003~0xFFFF | | | | | | | |
| 10~13 | User ID=0x00000000~0xFFFFFFFF | | | | | | | |
| 14~17 | Password=0x00000000~0xFFFFFFFF | | | | | | | |
| 18~19 | Status Code=0x0000 | | | | | | | |
| 20~21 | Attribute ID=0x0000~0xFFFF | | | | | | | |
| 22~ | Attribute Data=ANY | | | | | | | |

[RETURN PACKET]

| Bit Byte | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|-------------|---|---|---|---|---|---------------|----------------|--------------|
| 0~2 | Packet Header ID & Version | | | | | | | |
| 3 | 0 | 0 | 0 | 0 | 0 | NoRep. (0) | Cont. (0/1) | Reply (1) |
| 4~5 | Operation Code=id_val_operation_Set_job | | | | | | | |
| 6~7 | Block Number=0x0001~0xFFFF | | | | | | | |
| 8~9 | Parameter Length=0x0003~0xFFFF | | | | | | | |
| 10~13 | User ID=0x00000000~0xFFFFFFFF | | | | | | | |
| 14~17 | Password=0x00000000~0xFFFFFFFF | | | | | | | |
| 18~19 | Status Code=0x0000~0xFFFF | | | | | | | |
| 20~21 | Attribute ID=0x0000~0xFFFF | | | | | | | |
| 22~ | Attribute Data=ANY | | | | | | | |

F09070-00000000

FIG. 15

Send

[TRANSMISSION PACKET]

| Bit Byte | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|-------------|--------------------------------------|---|---|---|---|-----------------|----------------|-------------|
| 0~2 | Packet Header ID & Version | | | | | | | |
| 3 | 0 | 0 | 0 | 0 | 0 | RqRep. (0/1) | Cont. (0/1) | Send (0) |
| 4~5 | Operation Code=id_val_operation_send | | | | | | | |
| 6~7 | Block Number=0x0000~0xFFFF | | | | | | | |
| 8~9 | Parameter Length=0x0002~0xFFFF | | | | | | | |
| 10~13 | User ID=0x00000000~0xFFFFFFFF | | | | | | | |
| 14~17 | Password=0x00000000~0xFFFFFFFF | | | | | | | |
| 18~19 | Status Code=0x0000 | | | | | | | |
| 20~21 | Send Mode=0x00~0xFF | | | | | | | |
| 22~ | Send Source=ANY | | | | | | | |

[ANSWER PACKET]

| Bit Byte | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|-------------|--------------------------------------|---|---|---|---|---------------|--------------|--------------|
| 0~2 | Packet Header ID & Version | | | | | | | |
| 3 | 0 | 0 | 0 | 0 | 0 | NoRep. (0) | Cont. (0) | Reply (1) |
| 4~5 | Operation Code=id_val_operation_send | | | | | | | |
| 6~7 | Block Number=0x0000~0xFFFF | | | | | | | |
| 8~9 | Parameter Length=0x0000 | | | | | | | |
| 10~13 | User ID=0x00000000~0xFFFFFFFF | | | | | | | |
| 14~17 | Password=0x00000000~0xFFFFFFFF | | | | | | | |
| 18~19 | Status Code=0x0000~0xFFFF | | | | | | | |

FIG. 16

JobEnd

[TRANSMISSION PACKET]

| Bit Byte | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|-------------|---|---|---|---|---|-----------------|--------------|-------------|
| 0~2 | Packet Header ID & Version | | | | | | | |
| 3 | 0 | 0 | 0 | 0 | 0 | RqRep. (0/1) | Cont. (0) | Send (0) |
| 4~5 | Operation Code=id_val_operation_job_end | | | | | | | |
| 6~7 | Block Number=0x0001~0xFFFF | | | | | | | |
| 8~9 | Parameter Length=0x0001 | | | | | | | |
| 10~13 | User ID=0x00000000~0xFFFFFFFF | | | | | | | |
| 14~17 | Password=0x00000000~0xFFFFFFFF | | | | | | | |
| 18~19 | Status Code=0x0000 | | | | | | | |
| 20 | Control Flag=0x0001 | | | | | | | |

[RETURN PACKET]

| Bit Byte | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|-------------|---|---|---|---|---|---------------|----------------|--------------|
| 0~2 | Packet Header ID & Version | | | | | | | |
| 3 | 0 | 0 | 0 | 0 | 0 | NoRep. (0) | Cont. (0/1) | Reply (1) |
| 4~5 | Operation Code=id_val_operation_job_end | | | | | | | |
| 6~7 | Block Number=0x0001~0xFFFF | | | | | | | |
| 8~9 | Parameter Length=0x0005 | | | | | | | |
| 10~13 | User ID=0x00000000~0xFFFFFFFF | | | | | | | |
| 14~17 | Password=0x00000000~0xFFFFFFFF | | | | | | | |
| 18~19 | Status Code=0x0000~0xFFFF | | | | | | | |
| 20 | Control Flag=0x00~0x01 | | | | | | | |
| 21~24 | Object Handle=0x00000000~0xFFFFFFFF | | | | | | | |

FIG. 17

ExecuteJob

[TRANSMISSION PACKET]

| Bit Byte | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|-------------|---|---|---|---|---|-----------------|--------------|-------------|
| 0~2 | Packet Header ID & Version | | | | | | | |
| 3 | 0 | 0 | 0 | 0 | 0 | RqRep. (0/1) | Cont. (0) | Send (0) |
| 4~5 | Operation Code=id_val_operation_execute_job | | | | | | | |
| 6~7 | Block Number=0x0001~0xFFFF | | | | | | | |
| 8~9 | Parameter Length=0x0004 | | | | | | | |
| 10~13 | User ID=0x00000000~0xFFFFFFFF | | | | | | | |
| 14~17 | Password=0x00000000~0xFFFFFFFF | | | | | | | |
| 18~19 | Status Code=0x0000 | | | | | | | |
| 20~23 | Object Handle (JOB ID) | | | | | | | |
| 24~25 | Attribute ID=0x0000~0xFFFF | | | | | | | |
| 26~ | Attribute Data=ANY | | | | | | | |

[RETURN PACKET]

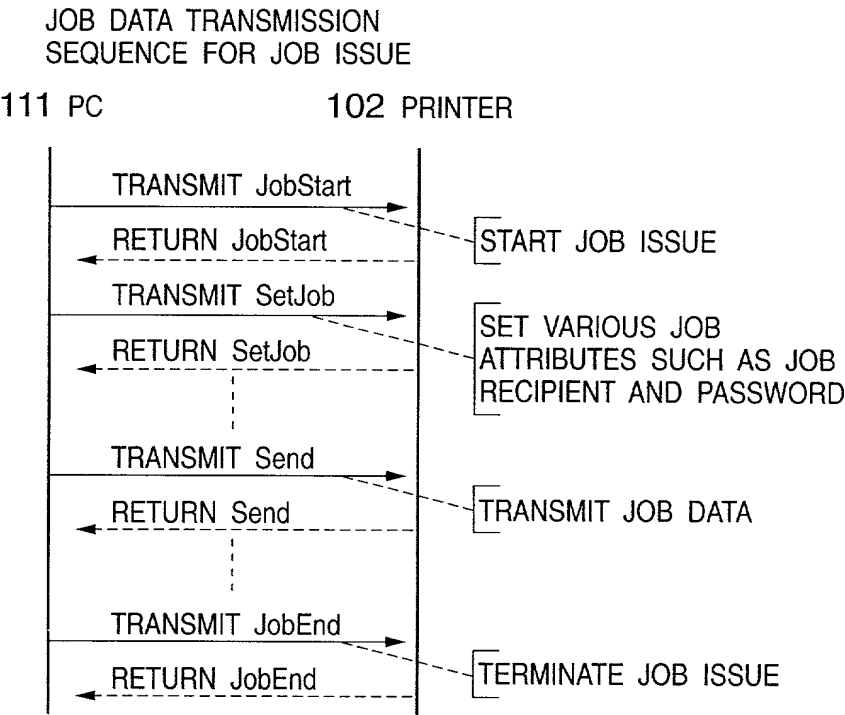
| Bit Byte | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|-------------|---|---|---|---|---|---------------|--------------|--------------|
| 0~2 | Packet Header ID & Version | | | | | | | |
| 3 | 0 | 0 | 0 | 0 | 0 | NoRep. (0) | Cont. (0) | Reply (1) |
| 4~5 | Operation Code=id_val_operation_execute_job | | | | | | | |
| 6~7 | Block Number=0x0001~0xFFFF | | | | | | | |
| 8~9 | Parameter Length=0x0008 | | | | | | | |
| 10~13 | User ID=0x00000000~0xFFFFFFFF | | | | | | | |
| 14~17 | Password=0x00000000~0xFFFFFFFF | | | | | | | |
| 18~19 | Status Code=0x0000~0xFFFF | | | | | | | |
| 20~23 | Object Handle (JOB ID) | | | | | | | |

FIG. 18

JOB ATTRIBUTES USED

| CLASSIFICATION | ATTRIBUTE | ATTRIBUTE IDENTIFIER |
|----------------|----------------------------------|--------------------------------------|
| JOB ATTRIBUTES | JOB NAME | id_att_job_name |
| | TIME OF JOB SUBMISSION BY CLIENT | id_att_job_submission_time_on_client |
| | JOB ISSUER | id_att_job_originator |
| | JOB RECIPIENT | id_att_job_owner |
| | JOB PASSWORD | id_att_job_password |

FIG. 19



109040-3553550

FIG. 20

COMMAND DATA TRANSMISSION
SEQUENCE FOR JOB EXECUTION DESIGNATION

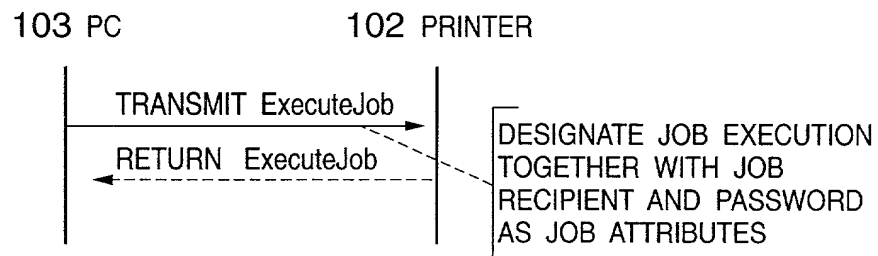


FIG. 21

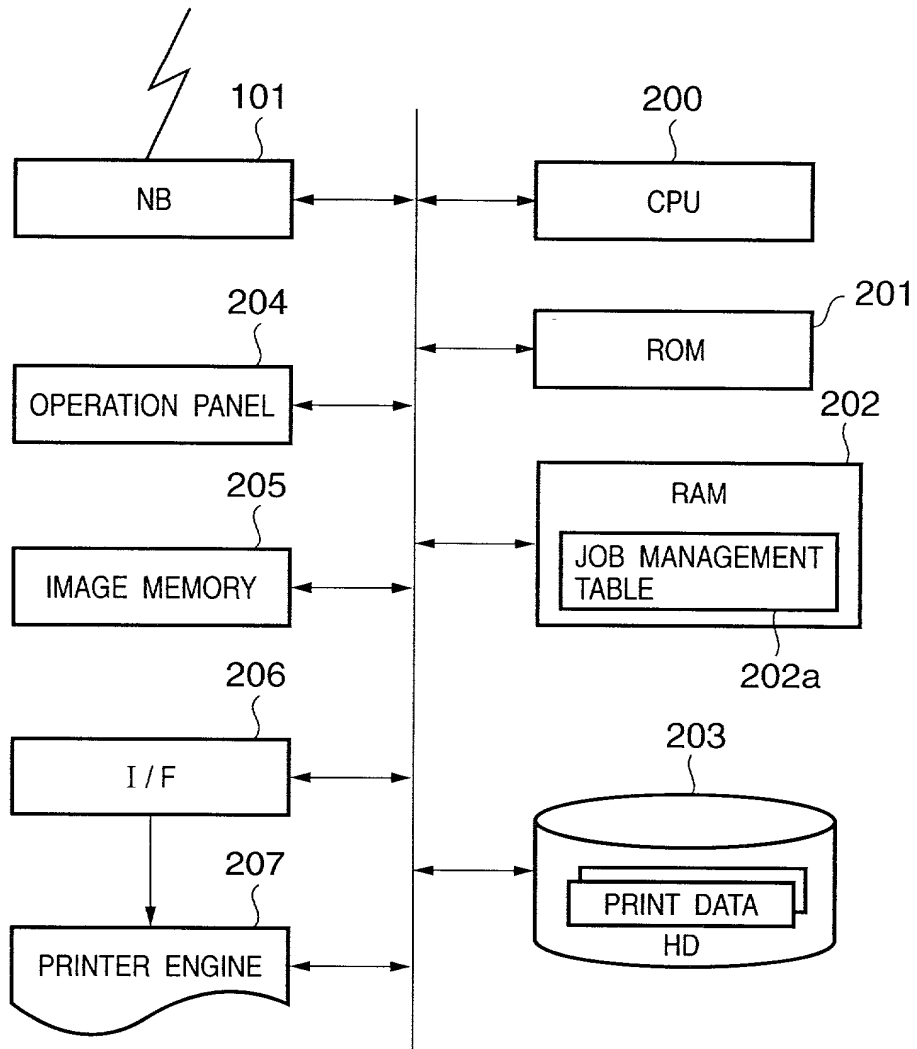


FIG. 22

| JOB ID | RECEPTION TIME | ISSUER | PASSWORD | RECIPIENT | PRINT DATA |
|--------|----------------------------|--------|----------|---------------------------------|------------|
| 00011 | 2000 / 02 / 10 10:45:15 | ××× | # # # | AAA (0), BBB (0), CCC (0) | 00011.PRN |
| ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ |
| ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ |

202a

FIG. 22

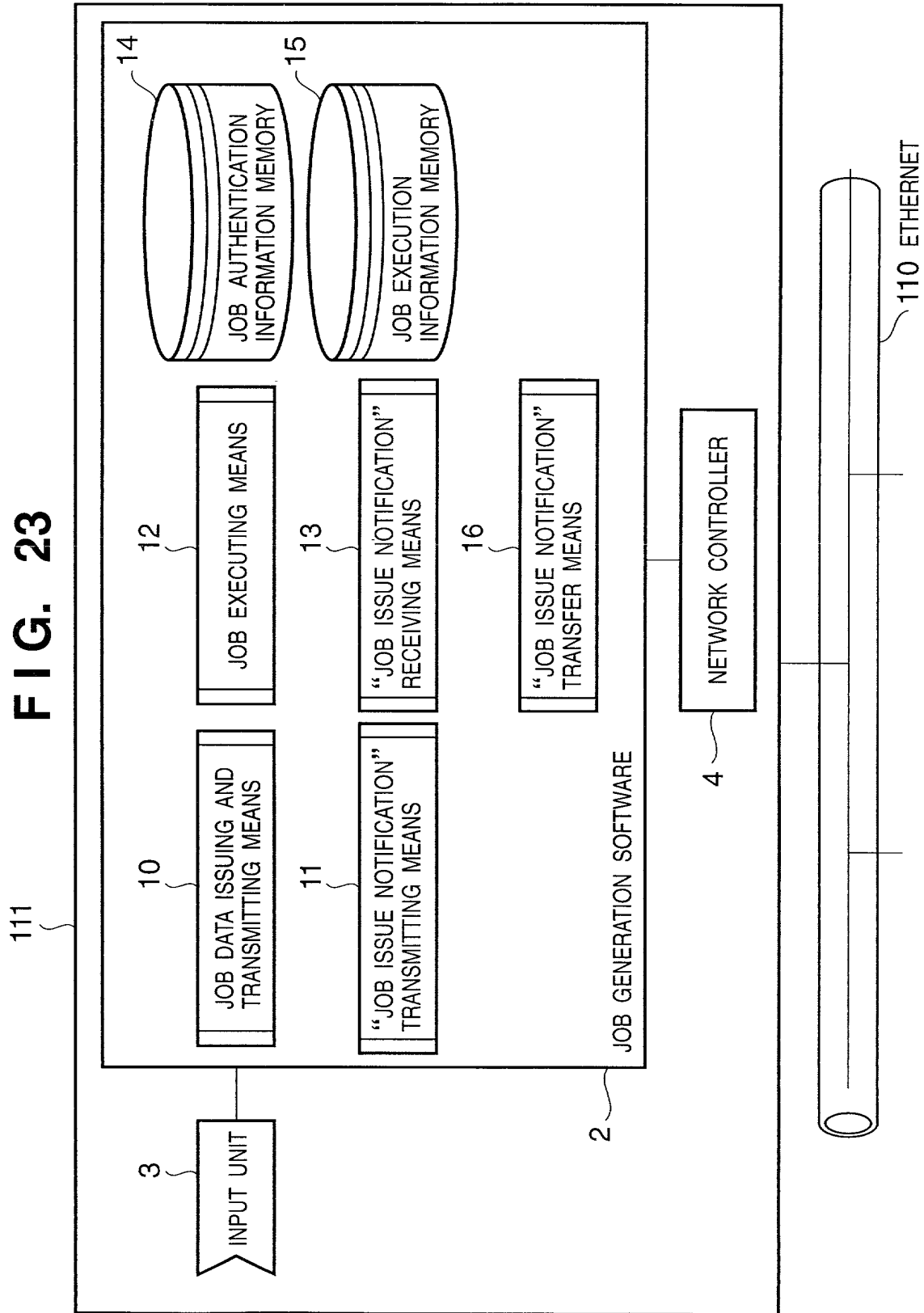
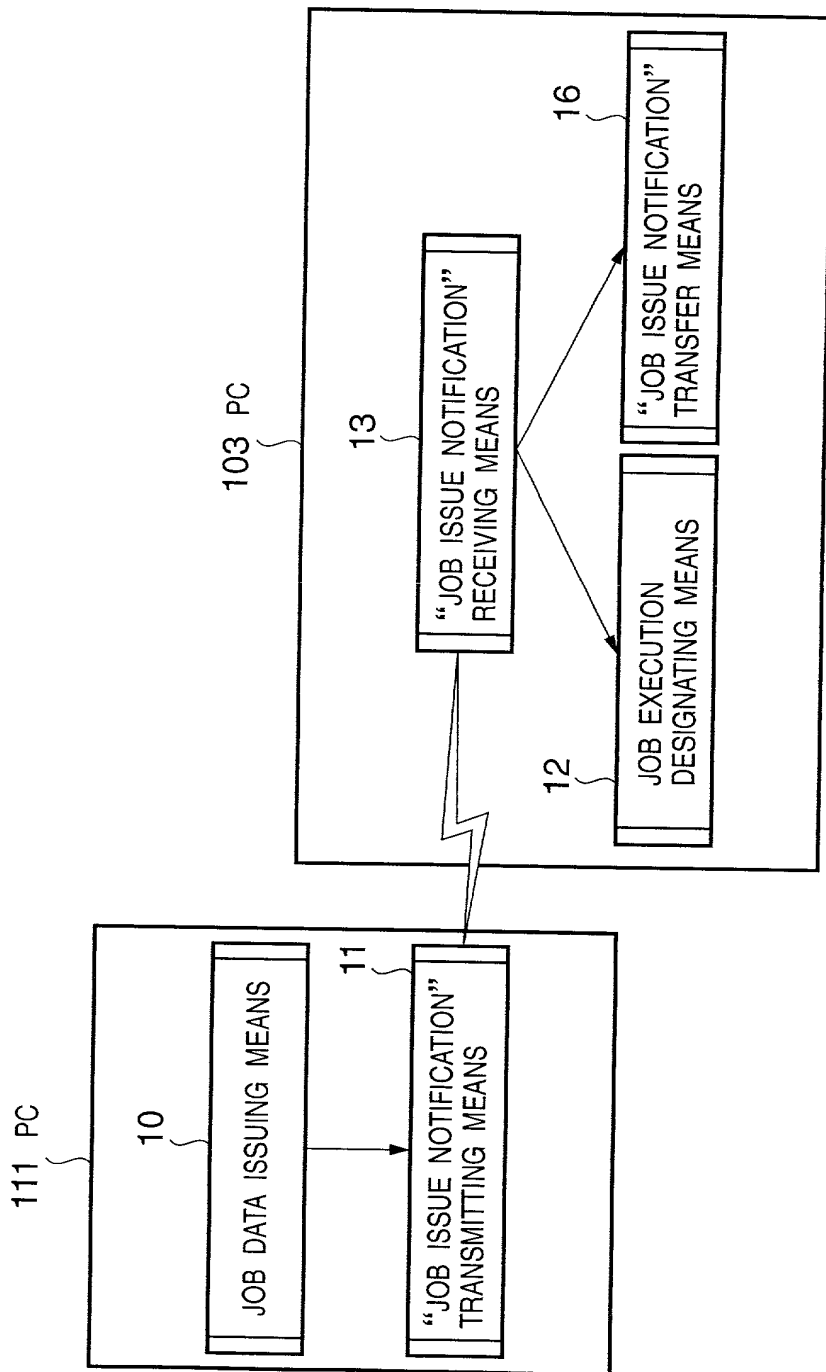


FIG. 24



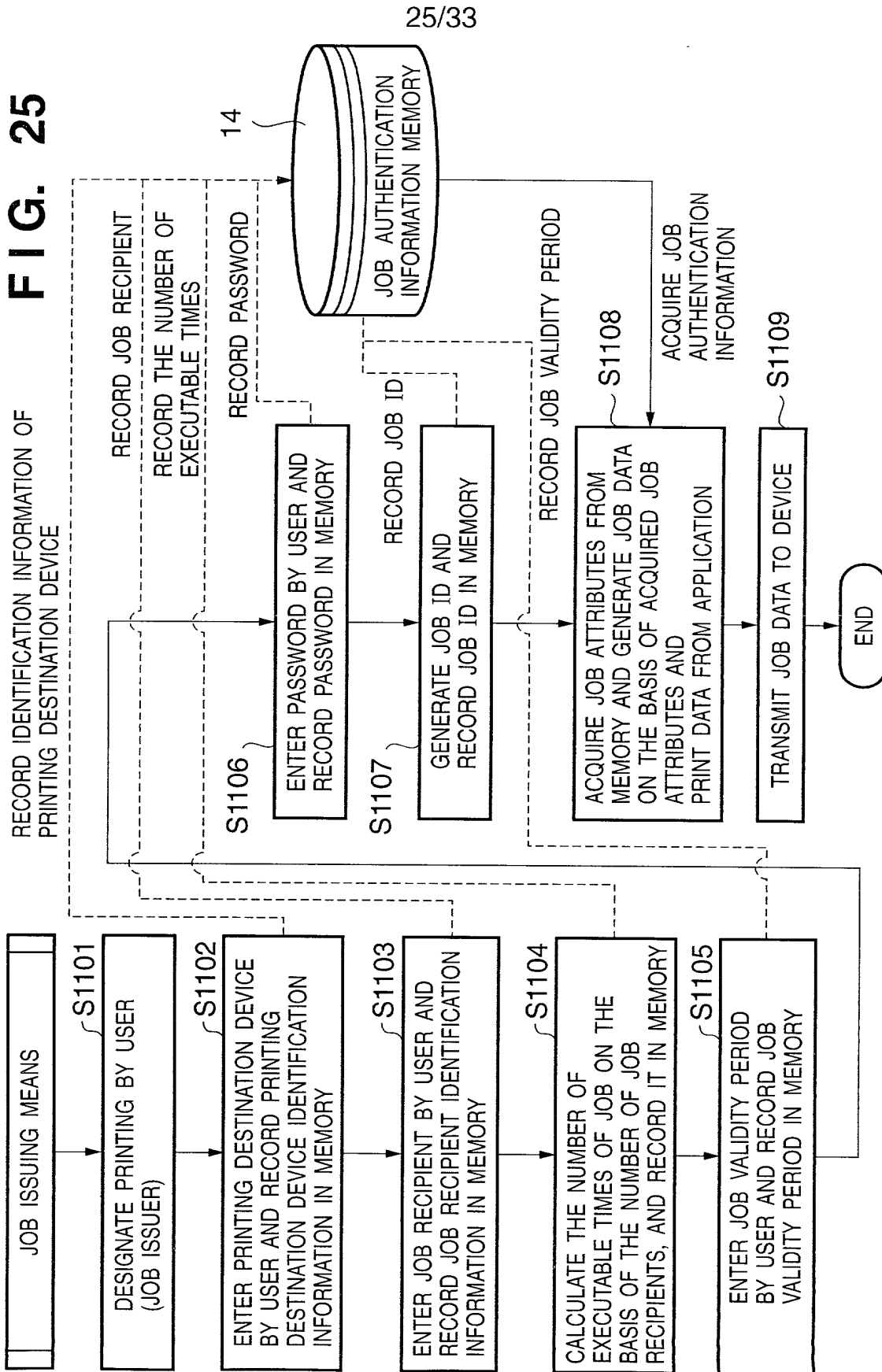


FIG. 26

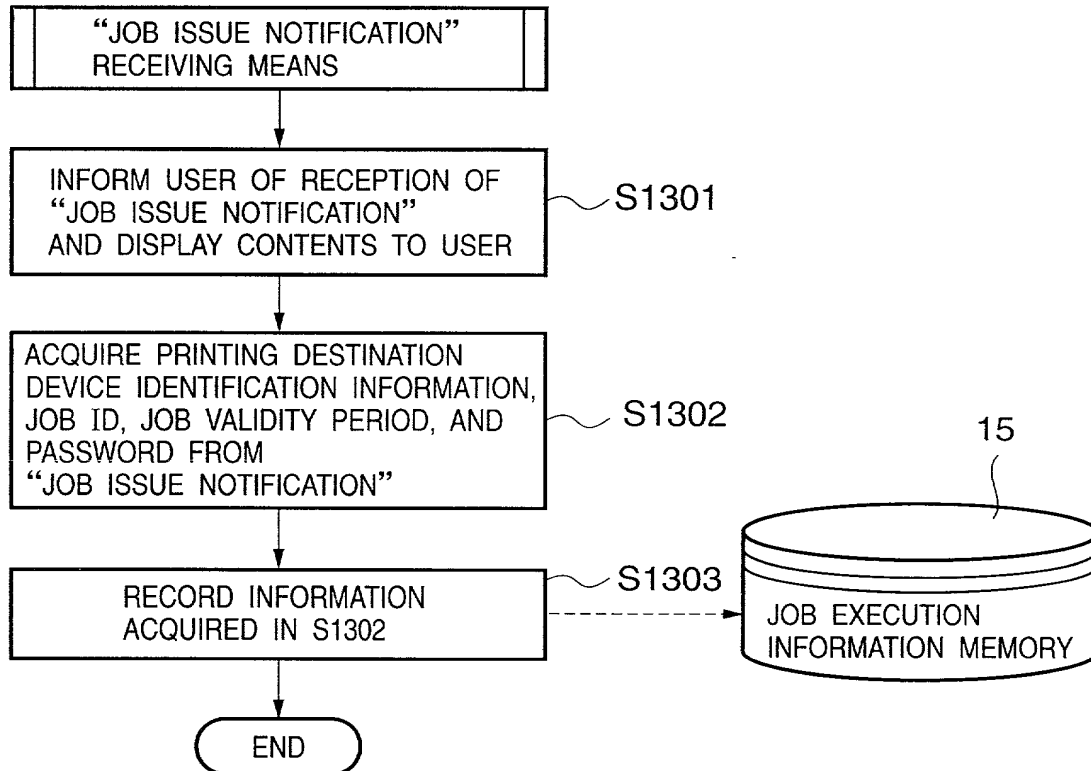


FIG. 27

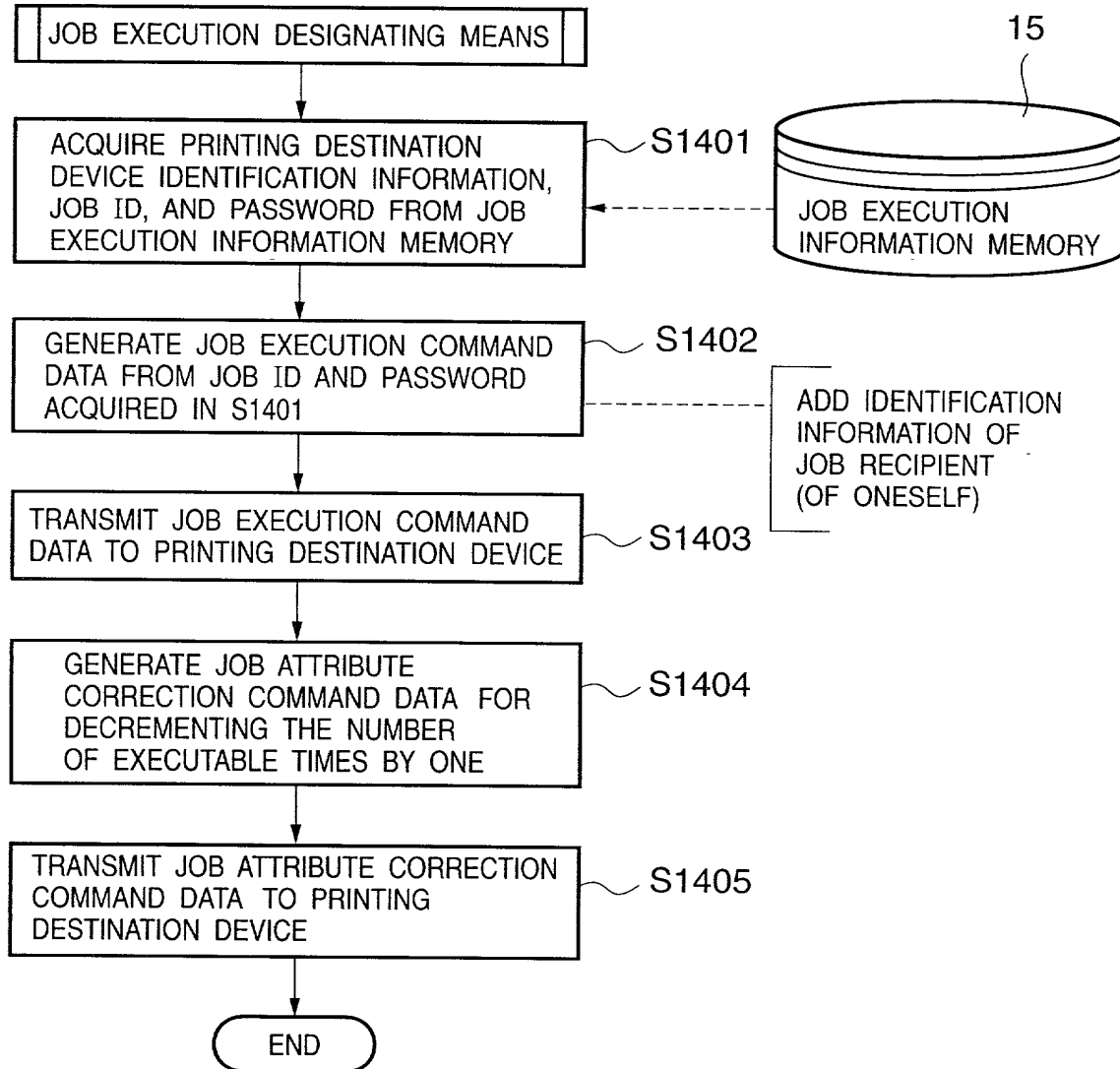


FIG. 28

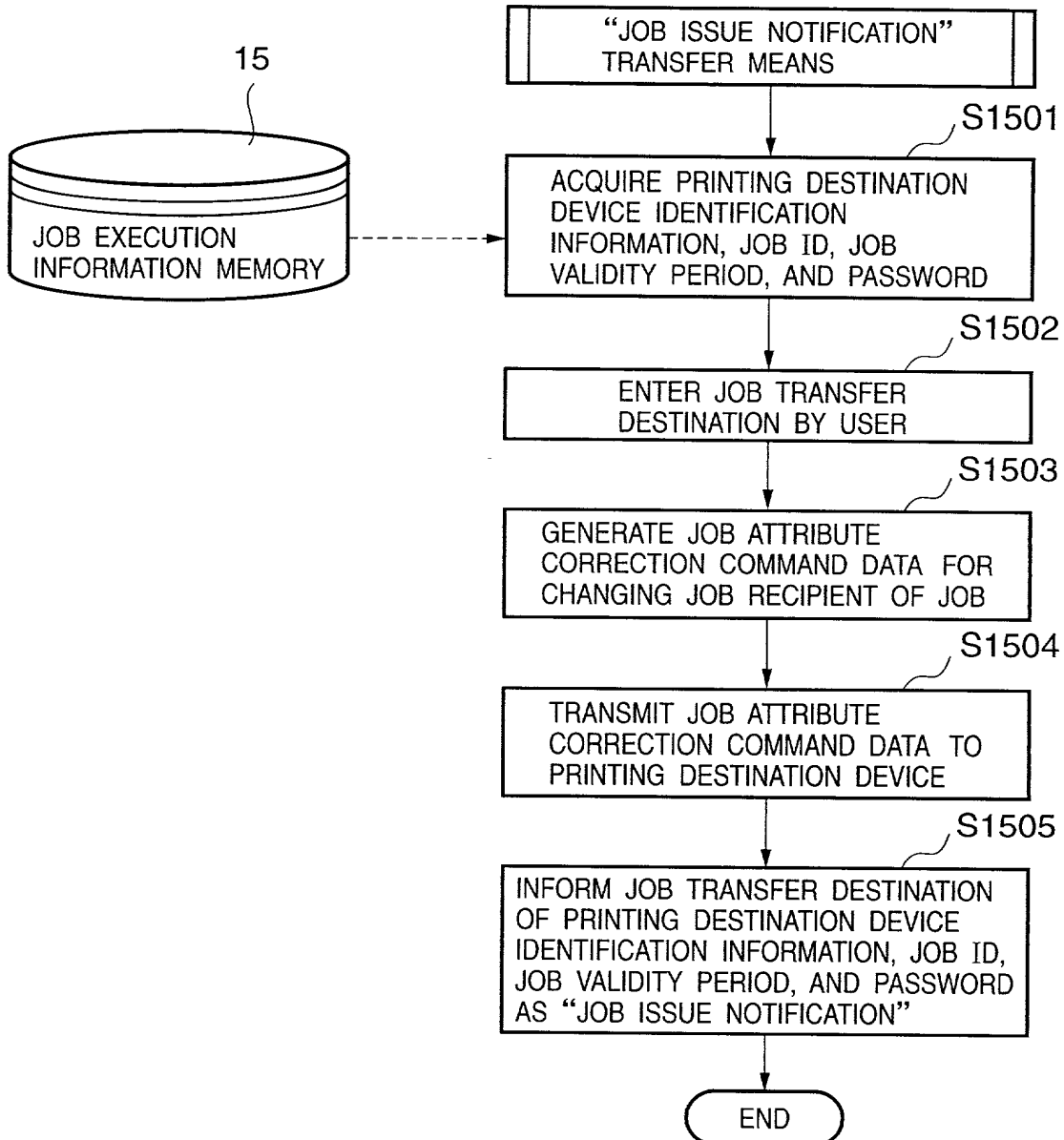


FIG. 29

OPERATIONS USED

| OPERATION | FUNCTION SUMMARY | SCRIPT SUMMARY |
|------------|----------------------------|---|
| JobStart | START ISSUE OF JOB | SET JOB ATTRIBUTES BY SetJob AND TERMINATE SETUP BY JobEnd |
| SetJob | SET JOB ATTRIBUTES | SET JOB ATTRIBUTES NECESSARY FOR JOB AUTHENTICATION BY THIS OPERATION |
| Send | TRANSMIT PRINT DATA | |
| JobEnd | TERMINATE ISSUE OF JOB | |
| Set | CORRECT JOB ATTRIBUTE | CORRECT JOB ATTRIBUTE IN ALREADY FORMED JOB DATA BY THIS OPERATION |
| ExecuteJob | DESIGNATE EXECUTION OF JOB | DESIGNATE JOB EXECUTION TOGETHER WITH JOB ATTRIBUTES NECESSARY FOR JOB EXECUTION DESIGNATION AND JOB AUTHENTICATION BY THIS OPERATION |

FIG. 30

Set
[TRANSMISSION PACKET]

| Bit Byte | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|-------------|-------------------------------------|---|---|---|---|-----------------|----------------|-------------|
| 0~2 | Packet Header ID & Version | | | | | | | |
| 3 | 0 | 0 | 0 | 0 | 0 | RqRep. (0/1) | Cont. (0/1) | Send (0) |
| 4~5 | Operation Code=id_val_operation_set | | | | | | | |
| 6~7 | Block Number=0x0001~0xFFFF | | | | | | | |
| 8~9 | Parameter Length=0x0007~0xFFFF | | | | | | | |
| 10~13 | User ID=0x00000000~0xFFFFFFFF | | | | | | | |
| 14~17 | Password=0x00000000~0xFFFFFFFF | | | | | | | |
| 18~19 | Status Code=0x0000 | | | | | | | |
| 20~23 | Object Handle (JOB ID) | | | | | | | |
| 24~25 | Attribute ID=0x0000~0xFFFF | | | | | | | |
| 26~ | Attribute Data=ANY | | | | | | | |

[RETURN PACKET]

| Bit Byte | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|-------------|-------------------------------------|---|---|---|---|---------------|----------------|--------------|
| 0~2 | Packet Header ID & Version | | | | | | | |
| 3 | 0 | 0 | 0 | 0 | 0 | NoRep. (0) | Cont. (0/1) | Reply (1) |
| 4~5 | Operation Code=id_val_operation_set | | | | | | | |
| 6~7 | Block Number=0x0001~0xFFFF | | | | | | | |
| 8~9 | Parameter Length=0x0006~0xFFFF | | | | | | | |
| 10~13 | User ID=0x00000000~0xFFFFFFFF | | | | | | | |
| 14~17 | Password=0x00000000~0xFFFFFFFF | | | | | | | |
| 18~19 | Status Code=0x0000~0xFFFF | | | | | | | |
| 20~23 | Object Handle (JOB ID) | | | | | | | |
| 24~25 | Attribute ID=0x0000~0xFFFF | | | | | | | |
| 26~ | Attribute Data=ANY | | | | | | | |

FIG. 30: SET/GET

FIG. 31

JOB ATTRIBUTES USED

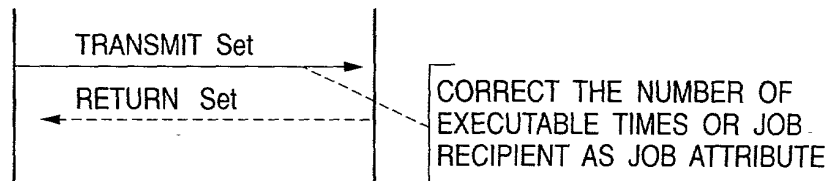
| CLASSIFICATION | ATTRIBUTE | ATTRIBUTE IDENTIFIER |
|----------------|---------------------------------------|--------------------------------------|
| JOB ATTRIBUTES | JOB NAME | id_att_job_name |
| | TIME OF JOB SUBMISSION BY CLIENT | id_att_job_submission_time_on_client |
| | JOB ISSUER | id_att_job_originator |
| | JOB RECIPIENT | id_att_job_owner |
| | JOB VALIDITY PERIOD | id_att_job_discard_time |
| | THE NUMBER OF EXECUTABLE TIMES OF JOB | id_att_job_available_count |
| | JOB PASSWORD | id_att_job_password |

FIG. 32

COMMAND DATA TRANSMISSION
SEQUENCE FOR JOB ATTRIBUTE CORRECTION

103 PC

102 PRINTER



T09040-BE692850

FIG. 33

